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WAYNE, PENNSYLVANIA 19087  
215-687-9510

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ORIGINAL  
(Red)

July 19, 1991  
R-585-5-1-29  
68-01-7346

Mr. Gregory Ham  
U.S. Environmental Protection Agency  
841 Chestnut Building  
Ninth and Chestnut Streets  
Philadelphia, Pennsylvania 19107

Subject: Final Report  
TDD No. F3-9012-16  
EPA DSN PA-2851  
Facility ID No. PAD361134083  
Carol Cable Company  
Altoona, Blair County, Pennsylvania

Dear Mr. Ham:

Submitted herewith is the draft Environmental Priorities Initiative Preliminary Assessment report for the subject site. The contents of the report are based on an evaluation of information contained in the site files provided, on the results of a review of regional and local hydrogeologic literature, and on data collected during a field evaluation performed in February 1991. Based on this review, the following is offered for EPA's consideration:

- It is recommended that no further action under CERCLA be conducted at the site. A Hazard Ranking System (HRS) screening score of 7.64 was obtained for the site. The score is based on available and projected information and is reflective of a small population that depends on groundwater for its drinking water supply. The score was also calculated based on pre-remedial conditions before Carol Cable Company occupied the property.
- According to a Philips representative, an extensive remediation program involving the removal of several underground storage tanks took place before Carol Cable Company moved into the facility. Sample data and other pertinent remediation information is not available at this time. Assuming that the underground storage tanks contained hazardous waste, a waste quantity score of 100 may be obtained. If so, the overall HRS screening score would become 20.10.

Carol Cable Company is located on four acres of land in Altoona, Blair County, Pennsylvania. Carol Cable Company is owned by Penn Central. The facility is located in a heavily commercialized area. Some residential neighborhoods are located within a one-mile radius of the site.

Operations at the plant include the assembly and distribution of battery cables, ignition wires, jumper cables, and other automotive assemblies. Wire used in the assembly process is brought in from outside contractors and incorporated into the different automotive assemblies.



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Wastes generated at the plant include solvents used to clean stamp presses and mechanical parts in some machinery. At the time of the site visit, approximately 10 gallons of solvent waste were stored in drums in the inside hazardous waste drum storage area. Wastes are removed within 90 days of generation; however, with such small quantities, no wastes have yet been removed.

A lead-casting process is performed at the plant. Lead is melted down and molded to form the lug ends of battery and jumper cables. A torit down-flow cartridge filter is used to collect lead exhaust fumes emitted during the melting process. The filter is checked and monitored four times a year. The filter was installed in May 1990 and has not needed replacement.

From 1981 until 1988, Philips ECG, Incorporated owned and operated the facility and manufactured radio and television receiving tubes. Little information is available regarding operations and wastes generated during Philips' operation at the facility. According to a Notification of Hazardous Waste Activity filed on October 27, 1980, wastes generated at the site were characterized as ignitable, corrosive, reactive, and toxic. More specifically, file information suggests that some solvents (paint solvents and waste trichloroethylene) and barium compounds were generated at the plant. A solvent waste called synasol was stored in a 3,000-gallon underground storage tank from 1981 to 1982.

Sometime in 1982, Philips started using the underground storage tank to store waste ethyl alcohol to be recycled and reused by American Products Company. This tank was removed sometime in 1984. During excavation, a spill occurred. Several monitoring wells were installed to monitor the migration of any waste material. Two other underground storage tanks were located on site. A 10,000-gallon tank was installed in 1975 and contained diesel fuel. This tank was removed in 1988. A 5,000-gallon tank was installed in 1968. This tank also contained ethyl alcohol. The tank was removed in 1984. No closure plans or sampling data pertaining to any of these tanks and their removal are currently available.

Wastes generated by Philips were characterized as ignitable, corrosive, and toxic according to a Notification of Hazardous Waste Activity filed in October 1980. Philips operated under EPA ID No. PAD004374955 from July 1981 until December 1988. During that time, Philips obtained an NPDES permit to discharge non-contact cooling water to Mill Run Stream. Other permits may have been held by Philips during that period of time.

Philips ceased operations in December 1988. Carol Cable Company obtained the plant shortly after Philips left. The NPDES permit held by Philips was terminated on August 1, 1988. The permit was not renewed by Carol Cable Company because there was no discharge to Mill Run Stream.

Two solid waste management units (SWMUs) have been identified at the facility: the inside hazardous waste drum storage area and the torit down-flow cartridge filter (used during the lead-casting process).

Residents within the study area rely on public and private water supplies utilizing groundwater and surface water for their drinking water supply. The Altoona City Water Authority (ACWA) is the largest supplier in the study area. ACWA utilizes 10 surface water sources and a 3-well field for its water supply. None of the surface water sources receive drainage from the site. The well field, located 1.5 miles north of the site, is used for emergency supply. This system has not been used for more than two years. ACWA serves approximately 28,000 connections. All those not served by public water are assumed to maintain private domestic wells for their water supply.

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Mr. Gregory Ham  
U.S. Environmental Protection Agency  
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Carol Cable Company Final Environmental Priorities Initiative Preliminary Assessment Report

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Attached, please find an evaluation of each SWMU identified at the site. A full description of each SWMU and the associated waste-handling practices can be found in section 4.0 of this report.

If you have any further questions, please contact me.

Respectfully submitted,



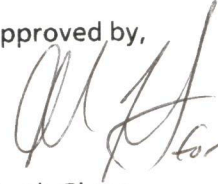
Steven Sottung  
Project Manager

Reviewed by,



Charles Meyer  
Section Supervisor

Approved by,



Garth Glenn  
Regional Manager, FIT 3

SS/law

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Solid Waste Management Unit Evaluation  
Carol Cable Company  
Altoona, Blair County, Pennsylvania  
EPA ID No. PAD361134083

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SWMU NO. 1

UNIT NAME: Inside Hazardous Waste Drum Storage Area

CONCLUSIONS:

Surface Water: The potential for release is low because the wastes are in small quantities and are collected in 55-gallon drums and stored in a concrete building.

Soils/Groundwater: The potential for release is low because the wastes are in small quantities and are collected in 55-gallon drums and stored in a concrete building.

Air: The potential for release is low because the wastes are in small quantities and are collected in 55-gallon drums and stored in a concrete building.

Subsurface Gas: The potential for release is low because the wastes are in small quantities and are collected in 55-gallon drums and stored in a concrete building.

FURTHER ACTION: No further action is recommended at this time.

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Solid Waste Management Unit Evaluation  
Carol Cable Company  
Altoona, Blair County, Pennsylvania  
EPA ID No. PAD361134083

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SWMU NO. 2

UNIT NAME: Torit Down-Flow Cartridge Filter

CONCLUSIONS:

Surface Water: The potential for release is low because the lead waste is collected in the filter inside the building.

Soils/Groundwater: The potential for release is low because the lead waste is collected in the filter inside the building.

Air: The potential for release is low because the lead waste is collected in the filter inside the building.

Subsurface Gas: The potential for release is low because the lead waste is collected in the filter inside the building.

FURTHER ACTION: No further action is recommended at this time.

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# PA Score Sheets

Carol Cable Company  
Site Name

9012-16.  
TDD No.

Blair County.  
County

Pennsylvania.  
State

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Prepared by: Steve Sotung  
 Reviewed and Approved by: Chuck Meyer  
 Date: 5/30/91

TDD No.: 9012-16  
 Site Name: Carol Cable Co.  
 Date: 5/16/91

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Source Descriptions: (list sources on site by name and provide most complete estimate of quantity for each)

Carol Cable Co. maintains an inside drum storage room for accumulated hazardous waste. The room contained 3 drums (55-gallon) at the time of the FET 3 visit. One drum contained 5 gallons of Maxxum 320, another drum contained 5 gallons of acetone. The third drum contained Rags and paper towels soaked the two foregoing solvents.

From 1981 to 1987, Philips accumulated about 2,203 lbs per year of waste trichloroethylene. No other sources can be identified at this time.

Waste Characteristics (WC) Calculations: (If single source, find WC associated with source and quantity using table 1a. If multiple sources, list by source name and provide WQ, from table 1a, for each source. Total WQ scores for sources and convert to WC using table 1b.)

Carol Cable Company.

① Drum Storage Area - 10 gallons = 100 lbs. waste.

Philips ECG, Inc.

① 2,203 lbs of Trichloroethylene.

2,203 lbs.

2,303 lbs of waste/yr.

WC = 32.

WC =

32.

Prepared by: Steve Sotung  
 Reviewed and Approved by: Chuck Meyer  
 Date: 5/30/91

TDD No.: F3-9012-16  
 Site Name: Cable Cable Company  
 Date: 5/16/91

## PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

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PA Table 1a: WC Scores for Single-Source Sites and Formulas for Multiple-Source Sites

TIER	SOURCE TYPE	SINGLE-SOURCE SITES (assigned WC scores)			MULTIPLE-SOURCE SITES
		WC = 18	WC = 32	WC = 100	
CONSTITUENT	N/A	≤ 100 lbs	> 100 to 10,000 lbs	> 10,000 lbs	lbs ÷ 1
WASTESTREAM	N/A	≤ 500,000 lbs	> 500,000 to 50 million lbs	> 50 million lbs	lbs ÷ 5,000
VOLUME	Landfill	≤ 6.75 million ft <sup>3</sup> ≤ 250,000 yd <sup>3</sup>	> 6.75 million ft <sup>3</sup> to 675 million ft <sup>3</sup> > 250,000 to 25 million yd <sup>3</sup>	> 675 million ft <sup>3</sup> > 25 million yd <sup>3</sup>	ft <sup>3</sup> ÷ 67,500 yd <sup>3</sup> ÷ 2,500
	Surface impoundment	≤ 6,750 ft <sup>3</sup> ≤ 250 yd <sup>3</sup>	> 6,750 ft <sup>3</sup> to 675,000 ft <sup>3</sup> > 250 to 25,000 yd <sup>3</sup>	> 675,000 ft <sup>3</sup> > 25,000 yd <sup>3</sup>	ft <sup>3</sup> ÷ 67.5 yd <sup>3</sup> ÷ 2.5
	Drums	≤ 1,000 drums	> 1,000 to 100,000 drums	> 100,000 drums	drums ÷ 10
	Tanks and non-drums containers	≤ 50,000 gallons	> 50,000 to 5 million gallons	> 5 million gallons	gallons ÷ 500
	Contaminated soil	≤ 6.75 million ft <sup>3</sup> ≤ 250,000 yd <sup>3</sup>	> 6.75 million ft <sup>3</sup> to 675 million ft <sup>3</sup> > 250,000 to 25 million yd <sup>3</sup>	> 675 million ft <sup>3</sup> > 25 million yd <sup>3</sup>	ft <sup>3</sup> ÷ 67,500 yd <sup>3</sup> ÷ 2,500
AREA	Pile	≤ 6,750 ft <sup>3</sup> ≤ 250 yd <sup>3</sup>	> 6,750 ft <sup>3</sup> to 675,000 ft <sup>3</sup> > 250 to 25,000 yd <sup>3</sup>	> 675,000 ft <sup>3</sup> > 25,000 yd <sup>3</sup>	ft <sup>3</sup> ÷ 67.5 yd <sup>3</sup> ÷ 2.5
	Landfill	≤ 340,000 ft <sup>2</sup> ≤ 7.8 acres	> 340,000 to 34 million ft <sup>2</sup> > 7.8 to 780 acres	> 34 million ft <sup>2</sup> > 780 acres	ft <sup>2</sup> ÷ 3,400 acres ÷ 0.078
	Surface impoundment	≤ 1,300 ft <sup>2</sup> ≤ 0.029 acres	> 1,300 to 130,000 ft <sup>2</sup> > 0.029 to 2.9 acres	> 130,000 ft <sup>2</sup> > 2.9 acres	ft <sup>2</sup> ÷ 13 acres ÷ 0.00029
	Contaminated soil	≤ 3.4 million ft <sup>2</sup> ≤ 78 acres	> 3.4 million to 340 million ft <sup>2</sup> > 78 to 7,800 acres	> 340 million ft <sup>2</sup> > 7,800 acres	ft <sup>2</sup> ÷ 34,000 acres ÷ 0.78
	Pile*	≤ 1,300 ft <sup>2</sup> ≤ 0.029 acres	> 1,300 to 130,000 ft <sup>2</sup> > 0.029 to 2.9 acres	> 130,000 ft <sup>2</sup> > 2.9 acres	ft <sup>2</sup> ÷ 13 acres ÷ 0.00029
	Land treatment	≤ 27,000 ft <sup>2</sup> ≤ 0.62 acres	> 27,000 to 2.7 million ft <sup>2</sup> > 0.62 to 62 acres	> 2.7 million ft <sup>2</sup> > 62 acres	ft <sup>2</sup> ÷ 270 acres ÷ 0.0062

1 ton = 2,000 lbs = 1 yd<sup>3</sup> = 4 drums = 200 gallons

\* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC scores for Multiple-Source Sites

WQ Total	WC Score
> 0 to 100	18
> 100 to 10,000	32
> 10,000	100

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Prepared by: Steve Sotung  
 Reviewed and Approved by: Chuck M. Myers  
 Date: 5/30/91

TDD No.: F3-9012-16  
 Site Name: Carol Coffee Company  
 Date: 5/16/91

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## GROUNDWATER PATHWAY SCORE SHEET

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Pathway Characteristics	
Are there monitoring wells on site?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Is the site located in karst terrain?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Depth to aquifer:	<u>23</u> ft
Distance to the nearest drinking-water well:	<u>13,200</u> ft

### LIKELIHOOD OF RELEASE

	A Suspected Release (550)	B No Suspected Release (500 or 340)	
1. SUSPECTED RELEASE: If you suspect a release to groundwater, assign a score of 550, and use only column A for this pathway.			1. Score suspected release only if data are available and discussed in PA report, or present rationale on page 15 of this package.
2. NO SUSPECTED RELEASE: If you do not suspect a release to groundwater, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.		500	
LR =		500	

### TARGETS

3. PRIMARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you suspect have been exposed to hazardous substances from the site. _____ people x 10 =			3. Score only if column A is scored under likelihood of release.
4. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you do not suspect have been exposed to hazardous substances from the site and assign the total population score from PA Table 2. Are any wells part of a blended system? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		5	4. Are apportionment data available in PA report <u>no</u> If yes, score only that population associated with potentially affected well(s).
5. NEAREST WELL: If you have identified any Primary Targets for groundwater, assign a score of 50; otherwise, assign the highest Nearest Well score from PA Table 2. If no drinking-water wells exist within 4 miles, assign a score of 0.	(50, 20, 18, 9, 5, 3, 2 or 0)	(20, 18, 9, 5, 3, 2 or 0) 3	
6. WELLHEAD PROTECTION AREA (WHPA): Assign a score of 20 if any portion of a designated WHPA is within 1/4 mile of the site; assign 5 if from 1/4 to 4 miles.	(20, 5, or 0)	(20, 5, or 0) 0	
7. RESOURCES: A score of 5 is assigned.	(5) 5	(5) 5	
(sum target values) T =		13	

### WASTE CHARACTERISTICS

8. A. If you have identified any Primary Targets for groundwater, assign the waste characteristics score calculated, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	(100 or 32)		
B. If you have NOT identified any Primary Targets for groundwater, assign the waste characteristics score calculated.	(100, 32, or 18)	(100, 32, or 18) 32	
WC =		32	

GROUNDWATER PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

(subject to maximum of 100)

$$\frac{500 \times 13 \times 32}{82,500} = 2.52$$

Prepared by: Steve Estuary  
Reviewed and Approved by: Steve Estuary  
Date: 5/30/91

TDD No: 9012-16  
Site Name: Carol Pottle G  
Date: 5/16/91

PA TABLE 2: VALUES FOR SECONDARY GROUNDWATER TARGET POPULATIONS

PA Table 2a: Non-Karst Aquifers

Distance from Site	Actual Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category										Population Values
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	
0 to 1/4 mile	0	20	1	2	5	16	52	163	521	1,633	5,214	16,325	0
> 1/4 to 1/2 mile	0	18	1	1	3	10	32	101	323	1,012	3,233	10,121	0
> 1/2 to 1 mile	0	9	1	1	2	5	17	52	167	522	1,668	5,224	0
> 1 to 2 miles	0	5	1	1	1	3	9	29	94	294	939	2,938	0
> 2 to 3 miles	63	3	1	1	1	2	7	21	68	212	678	2,122	1
> 3 to 4 miles	863	2	1	1	1	1	4	13	42	131	417	1,306	4
Nearest Well =		3											(sum values) Score =
													5

PA Table 2b: Karst Aquifers

Distance from Site	Actual Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category										Population Values
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	
0 to 1/4 mile		20	1	2	5	16	52	163	521	1,633	5,214	16,325	ORIGINAL (Red)
> 1/4 to 1/2 mile		20	1	1	3	10	32	101	323	1,012	3,233	10,121	
> 1/2 to 1 mile		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 1 to 2 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 2 to 3 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 3 to 4 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
Nearest Well =			(sum values) Score =										

Prepared by: Steve Satung  
 Reviewed and Approved by: Chuck Myers  
 Date: 5/30/91

TDD No.: 9012-16  
 Site Name: Carol Cable Co.  
 Date: 5/16/91

### SURFACE WATER PATHWAY LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT SCORE SHEET

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(Red)

Pathway Characteristics	
Is there definite drainage/discharge from source area(s)?	Yes _____ No <input checked="" type="checkbox"/>
Distance to surface water:	<u>1320</u> feet
Flood Frequency:	<u>&gt; 100</u> years
What is the downstream distance to the nearest drinking-water intake? <u>&gt; 15</u> miles	
nearest fishery? <u>&lt; 1/4</u> miles	nearest sensitive environment? <u>&lt; 1/4</u> miles

#### LIKELIHOOD OF RELEASE

1. SUSPECTED RELEASE: If you suspect a release to surface water, assign a score of 550 and use only column A for this pathway.

2. NO SUSPECTED RELEASE: If you do not suspect a release to surface water and the distance to surface water is 2,500 feet or less, assign a score of 500; otherwise, assign a score from the table below (or see note 2). Use only column B for this pathway.

Flood Plain	Score
Site in annual or 10-yr flood plain	500
Site in 100-yr flood plain	400
Site in 500-yr flood plain	300
Site outside 500-yr flood plain	100

A Suspected Release (550)	B No Suspected Release (500, 400, 300, or 100)
	500
(550)	(500, 400, 300, or 100) <u>500</u>

1. Score suspected release only if data are available or direct deposition is noted and discussed in PA report, or present rationale on page 15 of this package.

2. If < 2,500 ft. = 500  
 If within 100 yr. = 400  
 If outside 100 yr. and < 1.5 miles = 300  
 If outside 100 yr and > 1.5 miles = 100.

LR =

#### DRINKING WATER THREAT TARGETS

3. Determine the water-body types, flows (if applicable), and number of people served by all drinking-water intakes within the 15-mile target distance limit. If there are no drinking-water intakes within the target distance limit, assign a total Targets score of 5 at the bottom of this page (Resources only).

Intake Name	Water Body Type	Flow	People Served
		cfs	
		cfs	
		cfs	

4. PRIMARY TARGET POPULATION: If you suspect any drinking-water intake listed above has been exposed to hazardous substances from the site, list the intake name(s) and calculate the factor score based on the number of people served.

\_\_\_\_\_ People X 10 = \_\_\_\_\_

5. SECONDARY TARGET POPULATION: Determine the Secondary Target Population score from PA Table 3 based on the populations using drinking water from intakes that you do NOT suspect have been exposed to hazardous substances from the site.

Are any intakes part of a blended system? Yes \_\_\_\_\_ No ☒

6. NEAREST INTAKE: If you have identified any Primary Targets for the drinking water threat (Factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking-water intake exists within the 15-mile target distance limit, assign a score of zero.

7. RESOURCES: A score of 5 is assigned.

	0
(50, 20, 10, 2, 1, or 0)	(20, 10, 2, 1, or 0) <u>0</u>
(5) <b>5</b>	(5) <b>5</b>
(sum target values) T =	<u>5</u>

4. Score only if column A is scored under likelihood of release.

5. Are apportionment data available in PA report no? If yes, score only that population associated with potentially affected intakes.

Prepared by: Steve Sotting  
 Reviewed and Approved by: Carol Catha Co.  
 Date: 5/16/91

TDD No: 9012-16  
 Site Name: Carol Catha Co.  
 Date: 5/16/91

PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow Characteristics (see PA Table 4)	Actual Population	Nearest Intake (choose highest)	Population Served by Intakes Within Flow Category												Population Value
			1 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000		
< 10 cfs		20	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,246		
10 to 100 cfs		2	1	1	2	5	16	52	163	521	1,633	5,214	16,325		
> 100 to 1,000 cfs		1	0	0	1	1	2	5	16	52	163	521	1,633		
> 1,000 to 10,000 cfs		0	0	0	0	0	1	1	2	5	16	52	163		
> 10,000 cfs or Great Lakes		0	0	0	0	0	0	0	1	1	2	5	16		
3-Mile Mixing Zone		10	1	3	8	26	82	261	816	2,607	8,162	26,068	81,663		
Nearest Intake =		0	(sum values) Score =											0	

PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENT

Type of Surface Water Body		Dilution Weight
Water Body Type	Flow Characteristics	
minimal stream small to moderate stream moderate to large stream large stream to river large river	flow less than 10 cfs flow 10 to 100 cfs flow greater than 100 to 1,000 cfs flow greater than 1,000 to 10,000 cfs flow greater than 10,000 cfs	1 0.1 N/A N/A N/A
3-mile mixing zone of quiet-flowing streams or rivers	flow 10 cfs or greater	N/A
coastal tidal waters (harbors) sounds, bays, etc.), oceans, or Great Lakes	N/A	N/A

ORIGINAL (Red)

Prepared by: Steve Sorum  
 Reviewed and Approved by: Steve Sorum  
 Date: 5/30/91

TDD No.: 902-16  
 Site Name: Carol Park Co.  
 Date: 5/16/91

ORIGINAL  
(Red)

**SURFACE WATER PATHWAY (continued)  
 HUMAN FOOD CHAIN THREAT SCORE SHEET**

**LIKELIHOOD OF RELEASE**

	A Suspected Release	B No Suspected Release
	(550)	(500,400,300, or 100)
Enter the Surface Water Likelihood of Release score. LR =		500

**HUMAN FOOD CHAIN THREAT TARGETS**

8. Determine the water-body types and flows (if applicable) for all fisheries within the 15-mile target distance limit. If there are no fisheries within the target distance limit, assign a Targets score of 0 at the bottom of this page.

Fishery Name	Water Body Type	Flow
MILL RUN	TSP	10-100 cfs
BEAVER DAM BRANCH	WWP	10-100 cfs
FRANKSTOWN BRANCH	CWF	100-1,000 cfs
		cfs
		cfs

9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to hazardous substances from the site, assign a score of 300 and do not evaluate Factor 10. List the Primary Fisheries:

\_\_\_\_\_  
 \_\_\_\_\_

10. SECONDARY FISHERIES: If you have not identified any Primary Fisheries, assign a Secondary Fisheries score from the table below using the LOWEST flow at any fishery within the 15-mile target distance limit.

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
> 100 cfs, coastal tidal waters, oceans, or Great Lakes	12

8. Fisheries are waters that support aquatic life taken for human consumption (sport or commercial). Boundaries are determined by a change in flow rate.

9. Score only if column A is scored under Likelihood of Release and fishery is in proximity to release.

(300 or 0)	
(210, 30, 12, or 0)	30
(300, 210, 30, 12, or 0)	30

T =

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Prepared by: Steve Sotung  
 Reviewed and Approved by: Chad Mayes  
 Date: 5/30/91

TDD No.: 90126  
 Site Name: Carol Cable Co.  
 Date: 5/16/91

8

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(Red)

## SURFACE WATER PATHWAY ENVIRONMENTAL THREAT SCORE SHEET

### LIKELIHOOD OF RELEASE

	A Suspected Release (550)	B No Suspected Release (500, 400, 300, or 100)
Enter the Surface Water Likelihood of Release score. LR =		500

### ENVIRONMENTAL THREAT TARGETS

11. Determine the water-body types and flows (if applicable) for all surface water sensitive environments within the 15-mile target distance limit (see PA Tables 4 and 5). If there are no sensitive environments within the 15-mile target distance limit, assign a Targets score of 0 at the bottom of this page.

Environment Name	Water Body Type	Flow
Mill Run	Sm to Med Stream	10-100 cfs
Beaver Dam Branch	Sm to med Stream	10-100 cfs
Frankstown Branch	Med to large Stream	100-1,000 cfs
		cfs
		cfs

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to hazardous substances from the site, assign a score of 300 and do not evaluate Factor 13. List the Primary Sensitive Environments:

11. Are sensitive environments present within 15 stream miles and identified in PA report? \_\_\_\_ If yes, list only those in proximity to release or in stream segments with flows  $\leq 100$  cfs.

13. SECONDARY SENSITIVE ENVIRONMENTS:

- A. For Secondary Sensitive Environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Dilution Weight (PA Table 4)	Environment Type and Value (PA Tables 5 and 6)	Total
cfs	0.1 x	75 =	7.5
cfs	0.1 x	25 =	2.5
cfs	x	=	
cfs	x	=	
cfs	x	=	

Sum =

- B. If NO Secondary Sensitive Environments are located on surface water bodies with flows of 100 cfs or less, assign a score of 10.

12. Score only if column A is scored under likelihood of release and sensitive environment is in proximity to release.

(10 or 0)

(10 or 0)

T =

10

Prepared by: Steve Seuring  
 Reviewed and Approved by: Chuck Magin  
 Date: 5/30/91

TDD No. 9012-16  
 Site Name: Carol Cable Co.  
 Date: 5/16/91 **ORIGINAL**  
 (Red)

PA TABLE 5: SURFACE WATER AND AIR SENSITIVE ENVIRONMENTS VALUES

Sensitive Environment	Assigned Value
Critical habitat for federally designated endangered or threatened species	100
Marine sanctuary	
National park	
Designated federal wilderness area	
Ecologically important areas identified under the Coastal Zone Wilderness Act	
Sensitive areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act	
Critical areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lake or entire small lakes)	
National monument	
National seashore recreation area	
National lakeshore recreation area	
Habitat known to be used by federally designated or proposed endangered or threatened species	75
National preserve	
National or state wildlife refuge	
Unit of Coastal Barrier Resources System	
Federal land designated for the protection of natural ecosystems	
Administratively proposed federal wilderness area	
Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay, or estuary	
Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system	
Terrestrial areas utilized by large or dense aggregations of vertebrate animals (semi-aquatic foragers) for breeding	
National river reach designated as recreational	
Habitat known to be used by state-designated endangered or threatened species	50
Habitat known to be used by a species under review as to its federal endangered or threatened status	
Coastal barrier (partially developed)	
Federally designated scenic or wild river	25
State land designated for wildlife or game management	
State designated scenic or wild river	
State designated natural area	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	5
State-designated areas for the protection/maintenance of aquatic life under the Clean Water Act	
Wetlands	See PA Table 6 (Surface Water Pathway) or PA Table 9 (Air Pathway)

PA Table 6: Surface Water  
Wetlands Frontage Values

Total Length of Wetlands	Assigned Value
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

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 ORIGINAL  
 (Red)

**SURFACE WATER PATHWAY (concluded)  
 WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY**

WASTE CHARACTERISTICS	A	B
	Suspected Release (100 or 32)	No Suspected Release (100, 32, or 18)
14. A. If you have identified ANY Primary Targets for surface water, assign the waste characteristics score calculated or a score of 32, whichever is GREATER; do not evaluate part B of this factor.		
B. If you have NOT identified any Primary Targets for surface water, assign the waste characteristics score calculated.		32
WC =	(100, 32, or 18)	(100, 32, or 18) 32

**SURFACE WATER PATHWAY THREAT SCORES**

Threat	Likelihood of Release (LR) Score	Targets (T) Score	Pathway Waste Characteristics (WC) Score (determined above)	Threat Score LR x T x WC / 82,500
Drinking Water	500	5	32	(subject to a maximum of 100) .97
Human Food Chain	500	30	32	(subject to a maximum of 100) 5.82
Environmental	500	10	32	(subject to a maximum of 60) 1.94

**SURFACE WATER PATHWAY SCORE**  
 (Drinking Water Threat + Human Food Chain Threat + Environmental Threat)

(subject to a maximum of 100)

8.73

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## SOIL EXPOSURE PATHWAY SCORE SHEET

ORIGINAL  
(Red)

Pathway Characteristics	
Do any people live on or within 200 feet of areas of suspected contamination?	Yes _____ No <u>✓</u>
Do any people attend school or day care or within 200 feet of areas of suspected contamination?	Yes _____ No <u>✓</u>
Is the facility active? Yes <u>✓</u> No _____	If yes, estimate the number of workers: <u>215</u>

### LIKELIHOOD OF EXPOSURE

	A Suspected Contamination (550)	B No Suspected Contamination
1. SUSPECTED CONTAMINATION: Surficial contamination is assumed. A score of 550 is assigned.	550	

### RESIDENT POPULATION THREAT TARGETS

2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or day care on or within 200 feet of areas of suspected contamination. <u>0</u> People x 10 =	0		2. Score only if population is within 200 feet of source or known contamination.
3. RESIDENT INDIVIDUAL: If you have identified any Resident Population (Factor 2), assign a score of 50; otherwise, assign a score of 0.	(50 or 0) 0		
4. WORKERS: Assign a score from the following table based on the total number of workers at the facility and nearby facilities with suspected contamination:	(15, 10, 5, or 0) 10		4. Score only for workers on site and for off-site industries with known contamination.
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Assign a value from PA Table 7 for each terrestrial sensitive environment that is located on an area of suspected contamination:	0		5. Score only if area is known to be contaminated or if on site.
6. RESOURCES: A score of 5 is assigned.	(5) 5		
(sum target values) T =	15		

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
> 1,000	15

Terrestrial Sensitive Environment Type	Value
_____	_____
_____	_____

### WASTE CHARACTERISTICS

7. Assign the waste characteristics score calculated.	WC =	(100, 32, OR 18) 32	
---	------	------------------------	--

### RESIDENT POPULATION THREAT SCORE:

$$\frac{LE \times T \times WC}{82,500}$$

$$\frac{550 \times 15 \times 32}{82,500} = 3.2$$

### NEARBY POPULATION THREAT SCORE:

Assign a score of 2

$$2$$

### SOIL EXPOSURE PATHWAY SCORE:

Resident Population Threat + Nearby Population Threat

$$3.2 + 2 = 5.2$$

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 Date: 5/30/91

TDD No.: 9012-16  
 Site Name: East Gate Co.  
 Date: 5/16/91

ORIGINAL  
(Red)

PA TABLE 7: SOIL EXPOSURE PATHWAY  
 TERRESTRIAL SENSITIVE ENVIRONMENT VALUES

Terrestrial Sensitive Environment	Assigned Value
Terrestrial critical habitat for federally designated endangered or threatened species National park Designated federal wilderness area National monument	100
Terrestrial habitat known to be used by federally designated or proposed threatened or endangered species National preserve (terrestrial) National or state terrestrial wildlife refuge Federal land designated for protection of natural ecosystems Administratively proposed federal wilderness area Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	75
Terrestrial habitat used by state-designated endangered or threatened species Terrestrial habitat used by species under review for federally designated endangered or threatened status	50
State lands designated for wildlife or game management State-designated natural areas Particular areas, relatively small in size, important to maintenance or unique biotic communities	25

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TDD No.: 9012-16  
 Site Name: Cardinal Co.  
 Date: 5/16/91

**AIR PATHWAY SCORE SHEET**

**ORIGINAL  
(Red)**

Pathway Characteristics	
Do you suspect a release?	Yes _____ No <u>✓</u>
Distance to the nearest individual:	<u>0 - 1/4</u> <small>miles</small>

**LIKELIHOOD OF RELEASE**

	A Suspected Release	B No Suspected Release	
1. SUSPECTED RELEASE: If you suspect a release to air, assign a score of 550, and <u>use only column A</u> for this pathway.	(550)		1. Score only if data are available or if particulate emissions are noted and discussed in the PA report.
2. NO SUSPECTED RELEASE: If you do not suspect a release to air, assign a score of 500 and <u>use only column B</u> for this pathway.		(500) <u>500</u>	
<b>LR =</b>		<u>500</u>	

**TARGETS**

3. PRIMARY TARGET POPULATION: Determine the number of people subject to exposure from a release of hazardous substances through the air.			3. Score only if column A is scored under likelihood of release. If scored, include population within 1/4 mile.								
_____ People x 10 =											
4. SECONDARY TARGET POPULATION: Determine the number of people within the 4-mile target distance limit and assign the total population score from PA Table 8.		32	4. If population is scored in no. 3 above, the secondary population should not include the individuals within 1/4 mile of the site.								
5. NEAREST INDIVIDUAL: If you have identified any Primary Targets for the air pathway, assign a score of 50; otherwise, assign the highest Nearest Individual score from PA Table 8.	(50, 20, 7, 2, 1, or 0)	(20, 7, 2, 1, or 0) 20									
6. PRIMARY SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (PA Table 5) and wetland acreage values (PA Table 9) for environments subject to exposure from air hazardous substances.			6. Score only if column A is used in likelihood of release.								
<table><tr><th>Sensitive Environment Type</th><th>Value</th></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>	Sensitive Environment Type	Value									
Sensitive Environment Type	Value										
7. SECONDARY SENSITIVE ENVIRONMENTS: Use PA Table 10 to determine the score for secondary sensitive environments.		.28									
8. RESOURCES: A score of 5 is assigned.	(5) 5	(5) 5									
(sum target values) T =		57.28									

**WASTE CHARACTERISTICS**

9. A. If you have identified any Primary Targets for the air pathway, assign the waste characteristics score calculated, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.			
B. If you have NOT identified any Primary Targets for the air pathway, assign the waste characteristics score calculated.		<u>32</u>	
<b>WC =</b>		<u>32</u>	

**LR x T x WC**  
82,500

(subject to a maximum of 100)  

$$\frac{500 \times 57.28 \times 32}{82,500} = 11.1$$

Prepared by: Steve Gitting  
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PA TABLE 8: VALUES FOR SECONDARY AIR TARGET POPULATIONS

Distance from Site	Actual Population	Nearest Individual (choose highest)	Population Within Distance Category												Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	1,000,001 to 3,000,000	
On site	0	20	1	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,246	0
> 0 to 1/4 mile	25	20	1	1	1	4	13	41	130	408	1,303	4,081	13,034	40,811	1
> 1/4 to 1/2 mile	2568	2	0	0	1	1	3	9	28	88	282	882	2,815	8,815	9
> 1/2 to 1 mile	5389	1	0	0	0	1	1	3	8	26	83	261	834	2,612	8
> 1 to 2 miles	15411	0	0	0	0	0	1	1	3	8	27	83	266	833	8
> 2 to 3 miles	22003	0	0	0	0	0	1	1	1	4	12	38	120	376	4
> 3 to 4 miles	20359	0	0	0	0	0	0	1	1	2	7	23	73	229	2
Nearest Individual =		20	(sum values ) Score =												32

**PA TABLE 9: AIR PATHWAY VALUES  
FOR WETLAND AREA**

Wetland Area	Assigned Value
Less than 1 acre	0
1 to 50 acres	25
Greater than 50 to 100 acres	75
Greater than 100 to 150 acres	125
Greater than 150 to 200 acres	175
Greater than 200 to 300 acres	250
Greater than 300 to 400 acres	350
Greater than 400 to 500 acres	450
Greater than 500 acres	500

**PA TABLE 10: DISTANCE WEIGHTS AND CALCULATIONS  
FOR AIR PATHWAY SECONDARY SENSITIVE ENVIRONMENTS**

Distance	Distance Weight	Sensitive Environment Type and Value (from PA Table 5 or 9)	Product
On site	0.10	X	PFE
		X	ORIGINAL (Red)
0 to 1/4 mile	0.025	X	.14
		X	.14
1/4 to 1/2 mile	0.0054	X	
		X	
		X	
Total Environments Score = (sum of products)			.28

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ORIGINAL  
(Red)

## SITE SCORE CALCULATION

	S	S <sup>2</sup>
GROUND WATER PATHWAY SCORE (S <sub>gw</sub> ):	2.52	6.35
SURFACE WATER PATHWAY SCORE (S <sub>sw</sub> ):	8.74	76.39
SOIL EXPOSURE PATHWAY SCORE (S <sub>se</sub> ):	5.20	27.04
AIR PATHWAY SCORE (S <sub>a</sub> ):	11.11	123.43
SITE SCORE: $\sqrt{\frac{S_{gw}^2 + S_{sw}^2 + S_{se}^2 + S_a^2}{4}}$		7.64

NOTES: